

### **REMARKS**

Reconsideration and allowance is requested in consideration of the following remarks and amendments. Claims 1-5 and 7-13 are currently pending in connection with the present application. Claims 1, 5 and 10 are independent claims. By this amendment, claims 1, 2, 5, 7 and 10 have been amended. Support for these amendments will be found in the specification in paragraphs 25-30 and in former claim 6. Minor amendments have been made to the specification in paragraphs [0026] and [0027] to more clearly emphasize the distinction between Applicants' example embodiments and the prior art. Claim 6 has been cancelled and the subject matter of claim 6 has been incorporated into claim 5. Applicants traverse the rejection set forth in the Office Action dated December 23, 2005.

### **Information Disclosure Statement**

Applicants acknowledge and thank the Examiner for the careful consideration of all of the references listed in the Information Disclosure Statement filed on May 4, 2005.

### **Drawings**

Applicants acknowledge that the Drawings filed on October 9, 2003 have been accepted.

### **35 U.S.C. §112 CLAIM REJECTIONS**

Claims 1-4 stand rejected under 35 U.S.C. §112, second paragraph, as being incomplete for meeting of essential elements. The Examiner asserts that though the preamble to claim 1 claims a method of triggering registration, the actual step of triggering the registration is not cited.

Applicants have amended claim 1 to overcome the Examiner's rejection. Accordingly, withdrawal of the rejection is respectfully requested.

## **PRIOR ART REJECTIONS**

### **35 U.S.C. §102(a) 4G-1x-BCMCS Rejection**

Claims 1-13 stand rejected under 35 U.S.C. §102(a) as being anticipated by Swg 23 BCMCS Ad hoc: “signaling support for 1x BCMCS”, 28 August 2003, pages 1-53 (simply referred to as “3G-1x-BCMCS”). Applicants respectfully traverse this rejection.

3G-1x-BCMCS describes two procedures for BCMCS registration.<sup>1</sup> Disclosed **in the alternative** is a BCMCS registration system wherein the mobile station registers itself with a base station whenever the mobile station changes its: 1) BCMCS flow; or 2) frequency. These two **alternative embodiments** simply represent the separate prior art of frequency-based registration and flow-based registration systems.

Applicant submits that 3G-1x-BCMCS does not teach, suggest or render obvious, at least “triggering generation of a registration message based on change in flow **and** frequency ... if the second frequency is not known to the network based on a first flow identifier information previously registered by the mobile station with the network”, as recited in amended, independent claim 1. Particularly, 3G-1x-BCMCS does not teach of creating a **hybrid registration system based on both flow and frequency changes**. In fact, 3G-1x-BCMCS only teaches using the two prior known BCMCS flow-based or frequency-based registration models exclusive of one another (i.e., in the alternate only).

Accordingly, Applicants respectfully submit that 3G-1x-BCMCS fails to disclose, teach, suggest, or render obvious each and every feature of independent claim 1 and claim 1 is therefore patentable. For somewhat similar reasons, independent claims 5 and 10 are also patentable (although claims 1, 5 and 10 should be interpreted solely based on the limitations set forth

therein). Therefore, Applicants respectfully request that the rejection of independent claims 1, 5 and 10, and dependent claims 2-4, 6-9 and 11-13 under 35 U.S.C. §102(a) be withdrawn.

**35 U.S.C. §102(a) Qualcomm Rejection**

Claims 1, 5 and 10 stand rejected under 35 U.S.C. §102(a) as being anticipated by Qualcomm (“1x-BCMCS-registration for paging” 3GPP2 Ad hoc, September 15, 2003, pages 1-6). Applicants respectfully traverse this rejection.

Qualcomm discloses a flow-based registration system, or alternatively, a frequency-based registration system.<sup>2</sup> Qualcomm discloses a registration system that monitors the flow ID and informs the base station, **periodically**, through BCMCS registration messages, of any changes in its BCMCS flow ID. Based on the BCMCS flow ID registered and the LPM table, the base station controller knows which frequency the mobile station resides in.<sup>3</sup> Qualcomm also discloses an **alternative registration system** employing frequency-based registration.<sup>4</sup> In the frequency-based registration system, the mobile station registers with the base station whenever the mobile changes the frequency it monitors.

Applicants submit that Qualcomm does not teach, suggest, or render obvious, at least “triggering generation of a registration message based on a change in flow and frequency ... if the second frequency is not known to the network based on a first flow identifier information previously registered by the mobile station with the network” as recited in amended, independent claim 1. Similarly to 3G-1x-BCMCS mentioned above, Qualcomm does not teach, suggest, or render obvious any combination of the frequency-based and flow-based registration systems, such as Applicants’ “hybrid” registration system. Qualcomm only teaches using either

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<sup>1</sup> 3G-1X-BCMCS, page 20, lines 4-11.

<sup>2</sup> Qualcomm, pages 3-5.

<sup>3</sup> Qualcomm, page 3.

frequency-based on flow-based registration system exclusively (i.e. in the alternative only). Furthermore, the system in Qualcomm uses a registration system that monitors the flow ID or frequency and informs the base station **periodically through BCMCS registration messages of any changes in the BCMCS flow ID.**

Accordingly, Applicants respectfully submit that Qualcomm fails to disclose, teach, suggest, or render obvious each and every feature of independent claim 1 and claim 1 is therefore patentable. For somewhat similar reasons, independent claims 5 and 10 are also patentable (although claims 1, 5 and 10 should be interpreted solely based upon the limitations set forth therein). Therefore, Applicants respectfully request that the rejections of independent claims 1, 5 and 10, and dependent claims 2-4, 6-9 and 11-13 under 35 U.S.C. §102(a) be withdrawn.

**35 U.S.C. §102(e) Sinnaragah Rejection**

Claims 1, 5 and 10 stand rejected under 35 U.S.C. §102(e) as being anticipated by Sinnaragah et al. (U.S. PG Publication No. 2003/0114177). Applicants respectfully traverse this rejection.

Similarly to the two previous references, Sinnaragah teaches a flow-based registration system. In one embodiment, Sinnaragah teaches that a subscriber station indicates to the base-station that it intended to monitor a certain high-speed broadcast service (HSBS) which is found on a number of frequencies. Thereafter, the base station is allowed to freely change between the HSBS frequencies, thereby allowing the base station to still page the mobile station regardless of whether the mobile station has changed frequencies.<sup>5</sup> Therefore, the mobile station only needs to notify the base station when it changes the HSBS service to which it is subscribed.

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<sup>4</sup> Qualcomm, page 4.

<sup>5</sup> Sinnaragah, paragraphs [0062] to [0063] and [0079] to [0082].

In an alternative embodiment, registration may occur on a periodic basis in accordance with the status of a timer for a particular HSBS channel.<sup>6</sup> To account for situations where a mobile station is incapable or is not subscribed to an HSBS channel, all mobiles are required to change frequencies based on a current hashing method which tunes the subscriber stations to an appropriate frequency and a paging channel.<sup>7</sup>

Applicants submit that Sinnaragah fails to teach, suggest, or render obvious, at least “triggering generation of a registration message based on a change in flow and frequency, from a first flow to a second flow and a first frequency to a second frequency, that is monitored by the mobile station, if the second frequency is not known to the network based on a first flow identifier information previously registered by the noble with the network”, as recited in amended, independent claim 1. Instead, Sinnaragah only teaches a method wherein the mobile station registers with the base station when it has changed its HSBS. Unlike the present invention, should the mobile station in Sinnaragah change HSBS without changing frequencies, it would thereby be required to register with the network.

Accordingly, Applicants submit that Sinnaragah fails to teach, suggest, or render obvious every feature of amended, independent claim 1. For somewhat similar reasons, Applicants submit that claims 5 and 10 are also patentable (although claims 1, 5 and 10 should be interpreted solely based upon the limitations set forth therein). Therefore, Applicants respectfully request that the rejection of independent claims 1, 5 and 10 under 35 U.S.C. §102(e) be withdrawn.

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<sup>6</sup> Sinnaragah, paragraph [0063].

<sup>7</sup> Sinnaragah, paragraph [0079].

**CONCLUSION**

Accordingly, in view of the above amendments and remarks, reconsideration of the objections and rejections and allowance of each of claims 1-13 in connection with the present application is earnestly solicited.

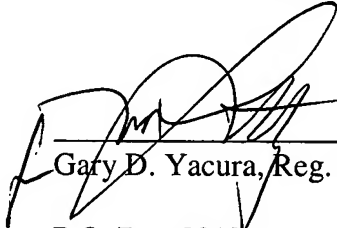
Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

HARNESS, DICKEY, & PIERCE, P.L.C.

By



Gary D. Yacura, Reg. No. 35,416

45,224

P.O. Box 8910  
Reston, Virginia 20195  
(703) 668-8000

GDY/MJL/NMZ:lak